

W A T E R D E P A R T M E N T

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September 15, 2006

Luis G. Avila
Associate Land & Water Use Scientist
Department of Water Resources
San Joaquin District
3374 E. Shields Ave
Fresno, CA 93726

SUBJECT: City of Santa Cruz 2005 Urban Water Management Plan

Dear Mr. Avila:

This letter is to respond to your secondary review of the City's 2005 Urban Water Management Plan. We appreciate the opportunity to work with you to make sure that the City's plan is considered by the California Department of Water Resources (DWR) to be complete.

We made a concerted effort to ensure that the 2005 plan the City adopted contained all the legally required provisions, as stated in the Water Code, but it appears from your review that there are a number of issues still considered to be missing or incomplete. One reason for this may be the difference in format between the City's plan and the DWR review form. We prepared the 2005 plan as a written report in order to be readable and useful for our community. The DWR review form, on the other hand, is more suited to a plan whose information is expressed mainly in tables and numbers. We hope to point out where we have addressed these deficiencies in the explanation that follows.

Our response includes two parts: 1) the narrative comments contained in this letter, and 2) numerical information which is included in the attached Excel spreadsheet. Any new or revised entries are highlighted in blue. Our responses addressed in the same order that they occur in the DRW review spreadsheet, organized by major topic.

1. Planned Water Supply Projects and Programs, including non-implemented DMMs - Water Code Section 10631(g)

If this section was marked incomplete only because the related section in our plan covering water demand management was considered deficient, please refer to our response to that issue at the end of this letter.

Our understanding of water code section 10631(g) is that if an agency is not currently implementing or is not planning to implement one or more of the 14 demand management measures, then the agency is required to include “an evaluation of each water demand management measure listed in paragraph (1) of subdivision (f)”, which includes a cost-benefit analysis and an description of any planned water supply projects that would provide water at a higher unit cost.

We want to reiterate, as is indicated in Chapter 6, that the City is currently implementing, or is scheduled to implement, all fourteen water conservation best management practices. Under the heading **Demand Management Measures**, starting on page 6-2 it states:

“The City of Santa Cruz’s active and planned conservation programs together include all of the demand management measures urban water agencies are required to describe and evaluate under section 10631(f) of the Urban Water Management Planning Act. The status of these programs is summarized above in Table 6-1.”

The remainder of Chapter 6 goes on to describe in detail exactly how the City is actively implementing now or is scheduled to implement within the next year each of the fourteen measures.

Since there are no measures listed under section 10631(f) that the City does not plan to implement, we are not required to prepare the cost-benefit analysis nor discuss planned water supply projects that would provide water at a higher unit cost required by section 10361(g).

2. Wastewater System Description - Water Code Section 10633(a)

The DWR review indicates data is missing for two topics. The first is to quantify the volume of wastewater collected and treated and the quantity of treated wastewater that meets recycled water standards.

Please refer to Chapter 7, pages 7-2 through 7-5. Under the heading **Wastewater System Description**, the text states:

The plant is designed to treat an average dry weather flow of 17 million gallons per day (mgd) and can accommodate peak wet weather flows of up to 81 mgd. The combined average daily flow currently measures around 10.0 mgd.

Under the heading **Projected Wastewater Volumes**, the text goes on to state:

The amount of wastewater generated in the City and District's service areas during dry weather is projected to increase from 10.0 to 10.8 mgd by 2020, an increase of 8 percent over the next 15 years, or an average of about 0.5 percent per year.

It is customary in the industry to express wastewater quantities in units of million gallons per day (mgd). If this section is considered incomplete because these values were not shown as annual volumes expressed in acre-feet, please note that we have made this conversion from mgd to acre-feet and entered that data on the Table 33 of the review spreadsheet. Also, please note that data are not available for year 2025, but the code section 10633 requires such information only "to the extent available..."

With regard to the quantity of treated wastewater that meets recycled water standards, under the headings of **Recycled Water Currently Being Used**, and **Potential Uses of Recycled Water**, on pages 7-3 and 7-4 the text states:

The City's wastewater plant does not currently nor is it permitted to produce recycled water for use offsite. With the commissioning of the new plant in 1998, however, recycled water has been used inside the plant to meet its major process water needs including chemical mixing, contact and non-contact cooling water, equipment washing, and heating....

The City's treatment plant currently produces wastewater of a quality that would be classified as Disinfected Secondary-23. The City's treated wastewater is potentially suitable for some agricultural applications and for limited public access irrigation. The level of treatment is not sufficient, however, for the water to be used for general irrigation or unrestricted use on playgrounds, parks, schoolyards, etc. Additional treatment above that currently provided would be needed to meet the state public health and safety requirements.

Since the City's wastewater plant is not permitted for producing recycled water for use offsite, we have entered zero in the line on Table 33 labeled "volume that meets recycled water standard".

The second topic under the category of wastewater/recycled water where information is considered missing or incomplete is to "describe and quantify potential uses of recycled water". Specifically, the DWR review seeks numerical information on volumes and

method of wastewater disposed and on volumes and type of recycled water used, both actual and potential, for Tables 34 and 35.

With regard to method of wastewater disposal, under the heading **Wastewater System Description**, on pages 7-2 and 7-3, the text states:

Treated wastewater is discharged to Monterey Bay through a deep water outfall extending 12,250 feet on the ocean bottom and terminating one mile offshore at a depth of approximately 110 feet below sea level.

In addition, there are several pages of text and a table beginning on page 7-4 under the heading of **Potential Uses of Recycled Water** that describe the potential uses of recycled water in Santa Cruz, as well as specific water recycling projects the City has investigated, and the reasons these projects were not pursued. Chapter 7 ends with a section called **Projected Use of Recycled Water**, in which it states that:

Recycled water use at the wastewater plant is projected to remain at current levels near 0.2 mgd (70 million gallons per year) through the next 20 years.

For the purpose of this review, we have converted daily wastewater volumes discharged to the ocean to annual volumes, expressed in acre-feet, and entered that data on the Table 34 of the review spreadsheet. We have also provided figures for the volume of wastewater that is recycled within the treatment plant, under the category of “Other (user type)” as process water use in Table 35.

3. Supply and Demand Comparison, Single Dry Year Scenario – Water Code Section 10635 (a)

The review identifies a single missing figure in Table 44 for water demand in year 2025.

We intentionally did not include demand projections for the year 2025 in the supply and demand assessment section. The reason for this is because the City is in the process of developing a new General Plan for the 2005-2020 planning horizon. Therefore, we felt it would be inappropriate for this report to forecast water demand beyond the City’s next General Plan, which won’t be finalized until at least year 2008. Please note on page 5-5 of the report, at the end of the first paragraph, it states:

It remains too speculative at this time to project water demand beyond the 2020 time frame.

For the purpose of this review, it is safe to assume that water demand will be at least the same as projected for year 2020 level at 4,345 million gallons or 13,334 acre feet per year. We have entered this value in Table 44.

4. Supply and Demand Comparison, Multiple Dry Year Scenario – Water Code Section 10635 (a)

For the multiple dry year scenario, the review indicates that data are incomplete in Tables 46, 47, 49, 50, 52, 53, 55, and 56, which cover the period 2006 to 2025 in one-year increments.

Our understanding is that the law requires a water supplier to prepare its reliability assessment in five-year increments. Water Code Section 10635(a) reads as follows: “every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in **five-year** increments” (emphasis added).

The required multiple dry year supply and demand assessment is presented in our plan in Table 5-5 on page 5-6 in five-year increments, consistent with the legal requirements of the Act. The one exception is that data on water demand for year 2025 was intentionally not included for the same reason about the City’s General Plan discussed above.

However, since the supply totals for this multiple dry year assessment are constant at 2,700 million gallons per year, or 8286 acre-feet, we applied this value to all the missing cells in the review spreadsheets representing supply. Likewise, since the City’s demand totals are based on a forecast that is projected to increase gradually over the five-year increments, we interpolated the data in our report into one-year increments and added this information to the review spreadsheets. We trust that this fulfills the need to have the data expressed in one-year increments.

5. Review of Implementation of 2000 UWMP – Water Code Section 10643

The DWR review indicates that the City’s 2005 plan does not include a section evaluating implementation of the 2000 plan and schedule. We do not agree that this is necessary. Section 10643 of the Water Code states that: “An urban water supplier shall implement its plan adopted pursuant this chapter with the schedule set forth in the plan”. It does not, as we read the law, require that the current plan to include a written assessment that addresses whether or not the previous plan was implemented according to schedule.

Nevertheless, we did include Table 6-3 on page 6-20 that summarizes progress on our demand management program achieved between 2000 and 2005. The table shows that we made considerable progress in terms of the millions of gallons of water saved under our water conservation plan and that we are on track toward reaching our conservation 2010 goal, which was fully described in the 2000 plan.

Moreover, there is an entire section beginning on page 4-6 devoted to an evaluation of the water demand projections contained in our 2000 plan. The section addresses how those projections compare to current demands and discusses the factors explaining why actual demands are trending lower than what was previously forecast in 2000. It goes on to modify the earlier demand forecast based on this review.

We believe that these sections qualify with the spirit of the law as reviewing implementation of the 2000 plan.

6. Demand Management Measures – Water Code Section 10643

The DWR review indicates that there are numerous instances in which the description of the City's demand management program is considered incomplete.

We understand that simply appending our completed 2003-04 BMP reports to the California Urban Water Conservation Council to the plan would have fully satisfied this requirement. The BMP reports, however, only document past activity over a two-year period and give no sense of an agency's direction and level of effort with respect to its demand management activities and priorities going forward. Rather than do that, we chose to prepare a narrative description because it better informs the community about the City's current and planned water conservation activities through 2010.

Water code section 10631(f) requires that the water supplier provide a description of 14 water demand management measures covering implementation steps, schedule, methods to evaluate effectiveness, and estimated water savings. Chapter 6 of the City's plan is devoted entirely to the subject of demand management and follows this format exactly. Each of the fourteen demand management measures (and even some not listed) is fully described in the 21-page section, with separate headings under each measure for each of the legally required elements, including:

- Measure Title
- Status (ongoing, scheduled, or completed)
- Brief description of the measure
- Schedule of implementation
- Methods to evaluate effectiveness
- Estimate of conservation savings
- Budget

Once again, we think that the main reason why this section of our plan is considered incomplete is due mainly to the difference in format between the City's written plan, in which our demand management efforts are described in narrative form, and the DWR spreadsheet review form. Nowhere in the Urban Water Management Planning Act does it state that an agency must provide annual figures over the next five year period for its

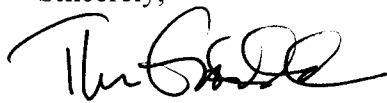
demand management program, yet this is, in effect, exactly what the review form requires.

For the purpose of DWR's review, we are attaching the City's completed 2003-04 BMP reports as evidence of our complying with this section. We are also adding numerical information about demand management activities during the next five year period to the DMM spreadsheets, along with a reference to the page number in the plan where that numerical information can be found.

Summary

We hope that this response is helpful to you in determining the completeness of the City's 2005 Urban Water Management Plan, and we appreciate your time and effort devoted to your review of our plan. Please feel free to contact me at (831) 420-5232 if you have any questions or need further information. Again, thanks for your help.

Sincerely,

A handwritten signature in black ink, appearing to read 'Toby Goddard', with a stylized, cursive script.

Toby Goddard
Water Conservation Manager

Cc: Dave Todd, DWR

Attachments:

1. UWMP Review and DMM Excel spreadsheets
2. 2003-04 BMP Reports to the CUWCC

Reported as of 9/1

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Water Supply & Reuse

Reporting Unit:

City of Santa Cruz Water Department

Year:

2003**Water Supply Source Information**

Supply Source Name	Quantity (AF) Supplied	Supply Type
North Coast Streams	3980	Local Watershed
San Lorenzo River	5886	Local Watershed
Loch Lomond Reservoir	2297	Local Watershed
Live Oak Wells	398	Groundwater

Total AF: 12561**Accounts & Water Use**

Reporting Unit Name:

City of Santa Cruz Water Department

Submitted to CUWCC

09/30/2004

Year:

2003**A. Service Area Population Information:**

1. Total service area population 90000

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	18290	4608	0	0
2. Multi-Family	2602	2492	0	0
3. Commercial	1893	2044	0	0
4. Industrial	57	759	0	0
5. Institutional	229	197	0	0
6. Dedicated Irrigation	406	739	0	0
7. Recycled Water	0	0	0	0
8. Other	247	218	0	0
9. Unaccounted	NA	0	NA	0
Total	23724	11057	0	0
	Metered		Unmetered	

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BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential Customers

Reporting Unit:

City of Santa Cruz Water Department

BMP Form Status:

100% Complete

Year:

2003**A. Implementation**

1. Based on your signed MOU date, 07/30/2001, your Agency STRATEGY DUE DATE is: 07/30/2003
2. Has your agency developed and implemented a targeting/ marketing strategy for SINGLE-FAMILY residential water use surveys? no
- a. If YES, when was it implemented?
3. Has your agency developed and implemented a targeting/ marketing strategy for MULTI-FAMILY residential water use surveys? no
- a. If YES, when was it implemented?

B. Water Survey Data**Survey Counts:**

	Single Family Accounts	Multi-Family Units
1. Number of surveys offered	0	0
2. Number of surveys completed	0	0

Indoor Survey:

3. Check for leaks, including toilets, faucets and meter checks no no
4. Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary no no
5. Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary; replace leaking toilet flapper, as necessary no no

Outdoor Survey:

6. Check irrigation system and timers no no
7. Review or develop customer irrigation schedule no no
8. Measure landscaped area (Recommended but not required for surveys) no no
9. Measure total irrigable area (Recommended but not required for surveys) no no
10. Which measurement method is typically used (Recommended but not required for surveys) None
11. Were customers provided with information packets that included evaluation results and water savings recommendations? no no
12. Have the number of surveys offered and completed, survey results, and survey costs been tracked? no no

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a. If yes, in what form are surveys tracked?

None

b. Describe how your agency tracks this information.

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

The Santa Cruz Water Department is in the process of developing a residential survey program which is scheduled to begin summer 2005.

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Reported as of 9/1

devices?

BMP 02: Residential Plumbing Retrofit

Reporting Unit: **City of Santa Cruz Water Department** BMP Form Status: **100% Complete** Year: **2003**

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? **yes**

a. If YES, list local jurisdictions in your service area and code or ordinance in each:

Santa Cruz Municipal Code 16.02 and 16.03 Santa Cruz County Code 7.74, City of Capitola Municipal Code 13.02

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? **yes**
3. Estimated percent of single-family households with low-flow showerheads **90%**
4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? **yes**
5. Estimated percent of multi-family households with low-flow showerheads **75%**
6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

Single Family: Low flow showerheads and other plumbing devices were distributed to 100% of single family residences in 2001. Staff inspections performed through time-of-sale ordinance in 2003 and 2004 demonstrate virtually all showerheads in single family homes meet 2.5 gpm standard. Multi-Family: Accounts with 10 or more units were required in late 1980's to install low-flow showerheads and certify property met city standards as a drought response measure. Staff inspections performed through time-of-sale ordinance in 2003 and 2004 demonstrate virtually all showerheads in multi-family homes meet 2.5 gpm standard.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? **yes**
- a. If YES, when did your agency begin implementing this strategy? **4/1/2001**
- b. Describe your targeting/ marketing strategy:

2.5 gpm showerheads are still available to customers at the Water Conservation Office free of charge. Faucet aerators and garden hose nozzles are also available to customers free of charge.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed	0	0
3. Number of toilet-displacement devices distributed	0	0
4. Number of toilet flappers distributed	0	0
5. Number of faucet aerators distributed	0	0
6. Does your agency track the distribution and cost of low-flow		no

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BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit: **City of Santa Cruz Water Department** BMP Form Status: **100% Complete** Year: **2003**

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year? **yes**
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production:
- a. Determine metered sales (AF) **10870**
- b. Determine other system verifiable uses (AF) **104**
- c. Determine total supply into the system (AF) **11963**
- d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required **0.92**
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production? **yes**
4. Did your agency complete a full-scale audit during this report year? **yes**
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit? **yes**
6. Does your agency operate a system leak detection program? **no**
- a. If yes, describe the leak detection program.

B. Survey Data

1. Total number of miles of distribution system line **260**
2. Number of miles of distribution system line surveyed **0**

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? **No**
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Instead of performing an active leak detection program, the City of Santa Cruz is investing \$650,000 annually implementing a service line replacement program. The purpose of this program is to systematically replace all 7,000+/- polybutylene service lines that are prone to failure with new copper service lines. This program is aimed at long-term leak prevention, since a substantial portion of our discovered losses have been found to occur on PB service lines. The estimated completion date

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of this program is 2010.

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BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit:
City of Santa Cruz Water Department
 BMP Form Status:
100% Complete
 Year:
2003

A. Implementation

- | | |
|---|-----|
| 1. Does your agency require meters for all new connections and bill by volume-of-use? | yes |
| 2. Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use? | no |
| a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed? | |
| b. Describe the program: | |
| 3. Number of previously unmetered accounts fitted with meters during report year. | 0 |

B. Feasibility Study

- | | |
|--|------|
| 1. Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? | no |
| a. If YES, when was the feasibility study conducted? (mm/dd/yyyy) | |
| b. Describe the feasibility study | |
| 2. Number of CII accounts with mixed-use meters | 1000 |
| 3. Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period | 0 |

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

- | | |
|---|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
| a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as" | |

E. Comments

B2. Number of CII accounts with mixed use meters estimated at 50% of total CII accounts. Actual number of mixed use meters is unknown. Beginning 2002, commercial accounts that add 5,000 or more square feet of landscaping as part of a land use permit process are required to have separate domestic and irrigation services services, under City landscape water conservation ordinance. Projects adding less than 5,000 square feet of landscaping must install a submeter for all irrigation fed off their domestic water account.

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BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit:
City of Santa Cruz Water Department
 BMP Form Status:
100% Complete
 Year:
2003

A. Water Use Budgets

- | | |
|--|-----|
| 1. Number of Dedicated Irrigation Meter Accounts: | 406 |
| 2. Number of Dedicated Irrigation Meter Accounts with Water Budgets: | 0 |
| 3. Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 4. Actual Use for Irrigation Meter Accounts with Water Budgets (AF): | 0 |
| 5. Does your agency provide water use notices to accounts with budgets each billing cycle? | no |

B. Landscape Surveys

- | | |
|--|----|
| 1. Has your agency developed a marketing / targeting strategy for landscape surveys? | no |
| a. If YES, when did your agency begin implementing this strategy? | |
| b. Description of marketing / targeting strategy: | |

- | | |
|---|----|
| 2. Number of Surveys Offered. | 0 |
| 3. Number of Surveys Completed. | 0 |
| 4. Indicate which of the following Landscape Elements are part of your survey: | |
| a. Irrigation System Check | no |
| b. Distribution Uniformity Analysis | no |
| c. Review / Develop Irrigation Schedules | no |
| d. Measure Landscape Area | no |
| e. Measure Total Irrigable Area | no |
| f. Provide Customer Report / Information | no |
| 5. Do you track survey offers and results? | no |
| 6. Does your agency provide follow-up surveys for previously completed surveys? | no |
| a. If YES, describe below | |

C. Other BMP 5 Actions

- | | |
|---|----|
| 1. An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? | no |
| 2. Number of CII mixed-use accounts with landscape budgets | 0 |
| 3. Do you offer landscape irrigation training? | no |
| 4. Does your agency offer financial incentives to improve | no |

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landscape water use efficiency?

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
------------------------------	-----------------------	-----------------------------	----------------------

- a. Rebates
 b. Loans
 c. Grants

- | | |
|--|-----|
| 5. Do you provide landscape water use efficiency information to new customers and customers changing services? | yes |
| a. If YES, describe below. | |

New residential and commercial landscapes are reviewed for conformance with the City's landscape water conservation requirements and standards. Applicants are provided with information on water efficient landscape designs and irrigation methods.

- | | |
|---|-----|
| 6. Do you have irrigated landscaping at your facilities? | yes |
| a. If yes, is it water-efficient? | yes |
| b. If yes, does it have dedicated irrigation metering? | no |
| 7. Do you provide customer notices at the start of the irrigation season? | yes |
| 8. Do you provide customer notices at the end of the irrigation season? | yes |

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

E. "At Least As Effective As"

- | | |
|---|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | No |
| a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as" | |

F. Comments
<http://bmp.cuwcc.org/bmp/print/printall.lasso>

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BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit:
City of Santa Cruz Water Department
 BMP Form Status:
100% Complete
 Year:
2003

A. Implementation

- | | |
|---|-----|
| 1. Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? | yes |
| a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is | |
| PG&E offers rebates for high efficiency clothes washers in our service area. | |
| 2. Does your agency offer rebates for high-efficiency washers? | yes |
| 3. What is the level of the rebate? | 100 |
| 4. Number of rebates awarded. | 654 |

B. Rebate Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	60000	60000
2. Actual Expenditures	65600	

C. "At Least As Effective As"

- | | |
|---|----|
| 1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? | no |
| a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as" | |

D. Comments

City of Santa Cruz also participates in LightWash program which is administered by Energy Solutions. We offered a \$200 water incentive for qualifying customers installing efficient appliances in multifamily common area laundry rooms.

<http://bmp.cuwcc.org/bmp/print/printall.lasso>

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BMP 07: Public Information Programs

Reporting Unit:

**City of Santa Cruz Water
Department**BMP Form Status:
100% CompleteYear:
2003**A. Implementation**

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? yes

a. If YES, describe the program and how it's organized

The Santa Cruz Water Department publishes a utility newsletter that is delivered to all mailing addresses in the service area. This newsletter, and the City's web site, <http://www.ci.santa-cruz.ca.us/W/index.html> are the primary tools for educating customers about water conservation. The Santa Cruz Sentinel is the local newspaper used primarily for advertising rebate programs. General conservation messages are coordinated with a county wide organization of water agencies. The City distributes a variety of brochures, booklets, and informational materials, like the Council's Practical Plumbing Handbook.

2. indicate which and how many of the following activities are included in your public information program

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	9
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	yes	2
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	yes	1
g. Speaker's Bureau	yes	32
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

D. Comments

Extensive public information activities were carried out in 2003 with the adoption and implementation of City's plumbing fixture retrofit regulations. Over 30 presentations about the new regulations were given

to real estate organizations countywide, reaching approximately 700 local realtors and brokers. Several new public information materials, in both printed form and online, were developed to support property owners and agents in complying with the program. Other public speaking events occurred about the city's integrated water plan at the Housing Advisory Committee and the Santa Cruz Neighbors Organization.

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BMP 08: School Education Programs

Reporting Unit:

**City of Santa Cruz Water
Department**BMP Form Status:
100% CompleteYear:
2003**A. Implementation**

1. Has your agency implemented a school information program to promote water conservation? yes
2. Please provide information on your school programs (by grade level).

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	no	0	0	0
Grades 4th-6th	yes	9	189	0
Grades 7th-8th	no	0	0	0
High School	no	0	0	0

3. Did your Agency's materials meet state education framework requirements? yes
4. When did your Agency begin implementing this program? 1/1/1980

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	5000
2. Actual Expenditures	5000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

D. Comments

The Water Department offers ranger guided tours of Loch Lomond Reservoir and staff guided tours of the Water Treatment Plant to upper elementary students in addition to offering classroom presentations. Resource materials were distributed to six teachers (class rooms between first grade and 8th grade). There were six tours and three class room presentations in 2003. The City also participated in a special event called "World of Water" at the Santa Cruz County fair with other local water agencies. We developed a "Santa Cruz Water School" program for lower elementary students, about the hydrologic cycle, drinking water collection, treatment, distribution, use, and water conservation. The City is also participating in the development of a County-wide water resources school education booklet. The \$5,000 budget expenditure is our contribution to this project. Otherwise, education expenditures are not tracked separately.

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BMP 09: Conservation Programs for CII Accounts

Reporting Unit: **City of Santa Cruz Water Department** BMP Form Status: **100% Complete** Year: **2003**

A. Implementation

- 1 Has your agency identified and ranked COMMERCIAL customers according to use? **yes**
- 2 Has your agency identified and ranked INDUSTRIAL customers according to use? **yes**
- 3 Has your agency identified and ranked INSTITUTIONAL customers according to use? **no**

Option A: CII Water Use Survey and Customer Incentives Program

- 4 Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? **yes**

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a Number of New Surveys Offered	0	0	0
b Number of New Surveys Completed	0	0	0
c Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e Site Visit	no	no	no
f Evaluation of all water-using apparatus and processes	no	no	no
g Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h Rebates	0	31	10050
i Loans	0	0	0
j Grants	0	0	0
k Others	0	0	0

Option B: CII Conservation Program Targets

- 5 Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option? **no**
- 6 Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings? **no**
- 7 Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991. **2**
- 8 Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991.

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1 Budgeted Expenditures	0	0
2 Actual Expenditures	0	

C. "At Least As Effective As"

- 1 Is your AGENCY implementing an "at least as effective as" variant of this BMP? **No**
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

In calendar year 2003, there were 24 commercial rebates for clothes washers. Of those 24, 18 were Lightwash commercial rebates. The total savings calculated for commercial clothes washer rebates is (57.5gallons X 24)(365days)= 503,700gallons/year or 1.5 acre-feet. Th city also provided rebates for 31 low consumption and 8 waterfree urinals, saving another 0.5 ac-ft annually. A CII survey program is planned for FY2005/2006. Rebate budget is included in BMP 14.

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BMP 09a: CII ULFT Water Savings

Reporting Unit: **City of Santa Cruz Water Department** BMP Form Status: **100% Complete** Year: **2003**

- 1 Did your agency implement a CII ULFT replacement program in the reporting year? **Yes**
- If No, please explain why on Line B.10

A. Targeting and Marketing

- 1 What basis does your agency use to target customers for participation in this program? Check all that apply.
- Consumption ranking
Potential savings
CII Sector or subsector

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

The most effective targeting method in 2003 was focusing on two particular sectors, schools and hotels

- 2 How does your agency advertise this program? Check all that apply.
- Direct letter
Bill message
Newsletter
Telephone
Web page
Newspapers

a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

Direct letter is the most effective method. Letters can be tailored to the individual customer, and provide an estimate of the potential annual water savings and \$ savings on water and sewer bills, for consideration by facility managers and decision makers.

B. Implementation

- 1 Does your agency keep and maintain customer participant information? (Read the Help information for a complete list of all the information for this BMP.) **Yes**
- 2 Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency? **Yes**
- 3 What is the total number of customer accounts participating in the program during the last year? **43**

CII Subsector	Standard	Air	Valve Floor	Valve Wall	Type Not
4					

	Gravity Tank	Assisted	Mount	Mount	Specified
a. Offices	8	0	0	0	0
b. Retail / Wholesale	0	0	0	0	0
c. Hotels	40	0	0	0	0
d. Health	5	0	0	0	0
e. Industrial	0	0	0	0	0
f. Schools: K to 12	5	0	31	55	0
g. Eating	1	0	0	0	0
h. Government	1	0	0	0	0
i. Churches	2	0	0	0	0
j. Other	18	0	0	0	0

5. Program design.
- Rebate or voucher
Retrofit on resale

- 6 Does your agency use outside services to implement this program? **No**

- a. if yes, check all that apply.

7. Participant tracking and follow-up.
- Letter
Site Visit

- 8 Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program.

- a. Disruption to business **3**
- b. Inadequate payback **4**
- c. Inadequate ULFT performance **3**
- d. Lack of funding **5**
- e. American's with Disabilities Act **1**
- f. Permitting **1**
- g Other. Please describe in B. 9. **5**

- 9 Please describe general program acceptance/resistance by customers, obstacles to implementation, and other issues affecting program implementation or effectiveness.

Water use efficiency does not seem to be a business priority. This may change as both water and sewer costs are rising locally in excess of inflation rate.

- 10 Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

Most of our efforts in 2003 were geared toward implementation of new retrofit on sale program, so we

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didn't actively market this program that much. We did expand the commercial toilet rebate program to include water free urinals, and replaced about 40 fixtures during the 2004 calendar year period.

C. Conservation Program Expenditures for CII ULFT

1 CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor	0	0
b. Materials	0	0
c. Marketing & Advertising	0	0
d. Administration & Overhead	0	0
e. Outside Services	0	0
f. Total	0	0

2 CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution	0
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	0

D. Comments

We don't track costs for this program separately. Budget for all rebate programs will be included in BMP 14 figures.

BMP 11: Conservation Pricing

Reporting Unit: City of Santa Cruz Water Department
BMP Form Status: 100% Complete
Year: 2003

A. Implementation

Rate Structure Data Volumetric Rates for Water Service by Customer Class

1. Residential
 - a. Water Rate Structure: Increasing Block
 - b. Sewer Rate Structure: Non-volumetric Flat Rate

c. Total Revenue from Volumetric Rates: \$5523112.38

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources: \$3012442.84

2. Commercial

a. Water Rate Structure: Uniform

b. Sewer Rate Structure: Uniform

c. Total Revenue from Volumetric Rates: \$1775745.9

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources: \$572726.88

3. Industrial

a. Water Rate Structure: Uniform

b. Sewer Rate Structure: Uniform

c. Total Revenue from Volumetric Rates: \$630158.18

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources: \$94146.3

4. Institutional / Government

a. Water Rate Structure: Uniform

b. Sewer Rate Structure: Uniform

c. Total Revenue from Volumetric Rates: \$91329.37

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources: \$46962.9

5. Irrigation

a. Water Rate Structure: Uniform

b. Sewer Rate Structure: Service Not Provided

c. Total Revenue from Volumetric Rates: \$677711.1

d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources: \$168229.65

6. Other

a. Water Rate Structure: Uniform

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- b. Sewer Rate Structure: Service Not Provided
- c. Total Revenue from Volumetric Rates: \$70922.27
- d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources: \$40807.6

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

D. Comments

- B. Conservation pricing program expenditures not tracked separately

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BMP 12: Conservation Coordinator

Reporting Unit: City of Santa Cruz Water Department
BMP Form Status: 100% Complete
Year: 2003

A. Implementation

1. Does your Agency have a conservation coordinator? yes

2. Is this a full-time position? yes

3. If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program?

4. Partner agency's name:

5. If your agency supplies the conservation coordinator:

a. What percent is this conservation coordinator's position? 100%

b. Coordinator's Name: Toby Goddard

c. Coordinator's Title: Water Conservation Coordinator

d. Coordinator's Experience and Number of Years: 9 years

e. Date Coordinator's position was created (mm/dd/yyyy): 1/1/1986

6. Number of conservation staff, including Conservation Coordinator: 3

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	186526	211773
2. Actual Expenditures	194202	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? no

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

D. Comments

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BMP 13: Water Waste Prohibition

Reporting Unit: **City of Santa Cruz Water Department**
 BMP Form Status: **100% Complete**
 Year: **2003**

A. Requirements for Documenting BMP Implementation

1 Is a water waste prohibition ordinance in effect in your service area? **yes**

a If YES, describe the ordinance

In 2003, the Santa Cruz City Council passed a revised and expanded ordinance SCMC 16.02 prohibiting water waste in the City's service area. County ordinance covering unincorporated portion of service area was updated at the same time. Changes made to the ordinance included the following: Prohibition on single pass cooling, non-recirculating commercial car washes and industrial clothes washing, and adding authority to limit landscaping irrigation between 10:00 and 5:00 p.m.

2 Is a copy of the most current ordinance(s) on file with CUWCC? **no**

a List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box

City of Santa Cruz, County of Santa Cruz, City of Capitola
 Santa Cruz Municipal Code 16.02 and Santa Cruz County Title 7.74, NA

B. Implementation

1 Indicate which of the water uses listed below are prohibited by your agency or service area

a Gutter flooding **yes**
 b Single-pass cooling systems for new connections **yes**
 c Non-recirculating systems in all new conveyor or car wash systems **yes**
 d Non-recirculating systems in all new commercial laundry systems **yes**
 e Non-recirculating systems in all new decorative fountains **yes**
 f Other, please name
 Washing exterior surfaces, structures and vehicles without a shut off nozzle, unauthorized use of fire hydrants, uncorrected plumbing leaks, indiscriminant running of water **yes**

2 Describe measures that prohibit water uses listed above

Field contact by customer service staff, letters, phone calls, and citations

Water Softeners:

3 Indicate which of the following measures your agency has supported in developing state law

a Allow the sale of more efficient, demand-initiated regenerating DIR models. **no**
 b Develop minimum appliance efficiency standards that:

i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used. **no**
 ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced. **no**
 c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.

4 Does your agency include water softener checks in home water audit programs? **no**

5 Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models? **no**

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1 Budgeted Expenditures	0	0
2 Actual Expenditures	0	

D. "At Least As Effective As"

1 Is your AGENCY implementing an "at least as effective as" variant of this BMP? **no**

a If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

E. Comments

Water waste ordinance enforcement activity and expenditures are not tracked separately.

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BMP 14: Residential ULFT Replacement Programs

Reporting Unit: **City of Santa Cruz Water Department**
 BMP Form Status: **100% Complete**
 Year: **2003**

A. Implementation

	Single-Family Accounts	Multi-Family Units
1 Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	yes	yes

Number of Toilets Replaced by Agency Program During Report Year

Replacement Method	SF Accounts	MF Units
2 Rebate	547	230
3 Direct Install	0	0
4 CBO Distribution	0	0
5 Other	534	328
Total	1081	558

6 Describe your agency's ULFT program for single-family residences

The City has two programs. It continues to offer a \$75 rebate for replacing inefficient tank type toilets with 1.6 gallon ULF toilets. In January 2003, the City adopted a plumbing fixture retrofit (time of sale) ordinance. It requires all residential, commercial, and industrial buildings to be retrofitted with low-consumption toilets, showerheads and urinals, whenever real estate is sold.

7 Describe your agency's ULFT program for multi-family residences

The City has two programs. It continues to offer a \$75 rebate for replacing inefficient tank type toilets with 1.6 gallon ULF toilets. In January 2003, the City adopted a plumbing fixture retrofit (time of sale) ordinance. It requires all residential, commercial, and industrial buildings to be retrofitted with low-consumption toilets, showerheads and urinals, whenever real estate is sold.

8 Is a toilet retrofit on resale ordinance in effect for your service area? **yes**

9 List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

The City of Santa Cruz, Santa Cruz County and the City of Capitola	Santa Cruz Municipal Code 16.03 Santa Cruz County Code 7.74 and Capitola Municipal Code 13.02
--	---

B. Residential ULFT Program Expenditures

	This Year	Next Year
1 Budgeted Expenditures	160000	160000

2 Actual Expenditures 64900

C. "At Least As Effective As"

1 Is your AGENCY implementing an "at least as effective as" variant of this BMP? **no**

a If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

D. Comments

The two methods for replacing toilets in our service area are rebates and the Plumbing Fixture Retrofit ordinance. Toilets replaced under the PFR ordinance are listed under Line 5 (Other) method. Budget figures include appropriations and expenditures for commercial toilet program.

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Water Supply & ReuseReporting Unit:
City of Santa Cruz Water DepartmentYear:
2004**Water Supply Source Information**

Supply Source Name	Quantity (AF) Supplied	Supply Type
North Coast Streams	4037	Local Watershed
San Lorenzo River	6090	Local Watershed
Loch Lomond Reservoir	2003	Local Watershed
Live Oak Wells	379	Groundwater

Total AF: 12509**Accounts & Water Use**Reporting Unit Name: Submitted to CUWCC Year:
City of Santa Cruz Water Department 02/14/2005 2004**A. Service Area Population Information:**

1. Total service area population 90000

B. Number of Accounts and Water Deliveries (AF)

Type	Metered		Unmetered	
	No. of Accounts	Water Deliveries (AF)	No. of Accounts	Water Deliveries (AF)
1. Single-Family	18352	4667	0	0
2. Multi-Family	2636	2501	0	0
3. Commercial	1886	2082	0	0
4. Industrial	56	763	0	0
5. Institutional	230	194	0	0
6. Dedicated Irrigation	418	763	0	0
7. Recycled Water	0	0	0	0
8. Other	221	262	0	0
9. Unaccounted	NA	0	NA	0
Total	23799	11232	0	0
	Metered		Unmetered	

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BMP 01: Water Survey Programs for Single-Family and Multi-Family Residential CustomersReporting Unit: BMP Form Status: Year:
City of Santa Cruz Water Department 100% Complete 2004**A. Implementation**

- Based on your signed MOU date, 07/30/2001, your Agency STRATEGY DUE DATE is 07/30/2003
- Has your agency developed and implemented a targeting/marketing strategy for SINGLE-FAMILY residential water use surveys?
a. If YES, when was it implemented? no
- Has your agency developed and implemented a targeting/marketing strategy for MULTI-FAMILY residential water use surveys?
a. If YES, when was it implemented? no

B. Water Survey Data**Survey Counts:**

	Single Family Accounts	Multi-Family Units
1. Number of surveys offered	0	0
2. Number of surveys completed	0	0

Indoor Survey:

- Check for leaks, including toilets, faucets and meter checks no no
- Check showerhead flow rates, aerator flow rates, and offer to replace or recommend replacement, if necessary no no
- Check toilet flow rates and offer to install or recommend installation of displacement device or direct customer to ULFT replacement program, as necessary, replace leaking toilet flapper, as necessary no no

Outdoor Survey:

- Check irrigation system and timers no no
- Review or develop customer irrigation schedule no no
- Measure landscaped area (Recommended but not required for surveys) no no
- Measure total irrigable area (Recommended but not required for surveys) no no
- Which measurement method is typically used (Recommended but not required for surveys) None
- Were customers provided with information packets that included evaluation results and water savings recommendations? no no
- Have the number of surveys offered and completed, survey results, and survey costs been tracked? no no

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- If yes, in what form are surveys tracked? None
- Describe how your agency tracks this information

C. Water Survey Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	70000
2. Actual Expenditures	0	

D. "At Least As Effective As"

- Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

E. Comments

The Santa Cruz Water Department is in the process of developing a residential survey program which is scheduled to begin summer 2005

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BMP 02: Residential Plumbing Retrofit

Reporting Unit: **City of Santa Cruz Water Department**
 BMP Form Status: **100% Complete**
 Year: **2004**

A. Implementation

1. Is there an enforceable ordinance in effect in your service area requiring replacement of high-flow showerheads and other water use fixtures with their low-flow counterparts? **yes**

a. If YES, list local jurisdictions in your service area and code or ordinance in each

Santa Cruz Municipal Code 16.03 Santa Cruz County Code 7.74 City of Capitola Municipal Code 13.02

2. Has your agency satisfied the 75% saturation requirement for single-family housing units? **yes**
3. Estimated percent of single-family households with low-flow showerheads. **90%**
4. Has your agency satisfied the 75% saturation requirement for multi-family housing units? **yes**
5. Estimated percent of multi-family households with low-flow showerheads. **90%**
6. If YES to 2 OR 4 above, please describe how saturation was determined, including the dates and results of any survey research.

Single Family: Low flow showerheads and other plumbing devices were distributed to 100% of single family residences in 2001. Staff inspections performed through time-of-sale ordinance in 2003 and 2004 demonstrate virtually all showerheads in single family homes meet 2.5 gpm standard.

Multi-Family: Accounts with 10 or more units were required in late 1980's to install low-flow showerheads and certify property met city standards as a drought response measure. Staff inspections performed through time-of-sale ordinance in 2003 and 2004 demonstrate virtually all showerheads in multi-family homes meet 2.5 gpm standard.

B. Low-Flow Device Distribution Information

1. Has your agency developed a targeting/ marketing strategy for distributing low-flow devices? **yes**
- a. If YES, when did your agency begin implementing this strategy? **4/1/2001**
- b. Describe your targeting/ marketing strategy.

2.5 gpm showerheads are still available to customers at the Water Conservation Office free of charge. Faucet aerators and garden hose nozzles are also available to customers free of charge.

Low-Flow Devices Distributed/ Installed	SF Accounts	MF Units
2. Number of low-flow showerheads distributed:	0	0
3. Number of toilet-displacement devices distributed	0	0
4. Number of toilet flappers distributed:	0	0
5. Number of faucet aerators distributed	0	0
6. Does your agency track the distribution and cost of low-flow	no	

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devices?

a. If YES, in what format are low-flow

devices tracked?

b. If yes, describe your tracking and distribution system.

We have leftover inventory from a 2001/02 conservation kit distribution program that we continue to make available to customers on request, but we no longer keep track of giveaway devices as we did with the initial distribution program.

C. Low-Flow Device Distribution Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? **No**

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

E. Comments

The City of Santa Cruz adopted a plumbing fixture retrofit ordinance in 2003 requiring, among other things, that all showerheads meet the 2.5 gpm standard when real estate is sold. Properties are inspected and flow rates of showerheads are measured before certification is issued. Inspections show virtually all showerheads in residential properties have been changed out and meet the 2.5 gpm low flow standard.

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BMP 03: System Water Audits, Leak Detection and Repair

Reporting Unit: **City of Santa Cruz Water Department**
 BMP Form Status: **100% Complete**
 Year: **2004**

A. Implementation

1. Has your agency completed a pre-screening system audit for this reporting year? **yes**
2. If YES, enter the values (AF/Year) used to calculate verifiable use as a percent of total production.
- a. Determine metered sales (AF) **10993**
- b. Determine other system verifiable uses (AF) **132**
- c. Determine total supply into the system (AF) **11950**
- d. Using the numbers above, if (Metered Sales + Other Verifiable Uses) / Total Supply is < 0.9 then a full-scale system audit is required. **0.93**
3. Does your agency keep necessary data on file to verify the values used to calculate verifiable uses as a percent of total production? **yes**
4. Did your agency complete a full-scale audit during this report year? **yes**
5. Does your agency maintain in-house records of audit results or the completed AWWA audit worksheets for the completed audit? **yes**
6. Does your agency operate a system leak detection program? **no**
- a. If yes, describe the leak detection program.

B. Survey Data

1. Total number of miles of distribution system line **260**
2. Number of miles of distribution system line surveyed. **0**

C. System Audit / Leak Detection Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? **No**
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as"

E. Comments

Instead of performing an active leak detection program, the City of Santa Cruz is investing \$650,000 annually implementing a service line replacement program. The purpose of this program is to systematically replace all 7,000+/- polybutylene service lines that are prone to failure with new copper service lines. This program is aimed at long-term leak prevention, since a substantial portion of our discovered losses have been found to occur on PB service lines. The estimated completion date

of this program is 2010. Line 2a above is not adjusted for meter reading lag time (generally negligible error) because not all data have been collected by reporting deadline. Water audit is performed on a calendar year basis (Jan 1 - Dec 31).

<http://bmp.cuwcc.org/bmp/print/printall.lasso>

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BMP 04: Metering with Commodity Rates for all New Connections and Retrofit of Existing

Reporting Unit: **City of Santa Cruz Water Department** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- 1 Does your agency require meters for all new connections and bill by volume-of-use? yes
- 2 Does your agency have a program for retrofitting existing unmetered connections and bill by volume-of-use? no
 - a. If YES, when was the plan to retrofit and bill by volume-of-use existing unmetered connections completed?
 - b. Describe the program.
- 3 Number of previously unmetered accounts fitted with meters during report year 0

B. Feasibility Study

- 1 Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? no
 - a. If YES, when was the feasibility study conducted? (mm/dd/yy)
 - b. Describe the feasibility study.
- 2 Number of CII accounts with mixed-use meters 1000
- 3 Number of CII accounts with mixed-use meters retrofitted with dedicated irrigation meters during reporting period 0

C. Meter Retrofit Program Expenditures

	This Year	Next Year
1 Budgeted Expenditures	0	0
2 Actual Expenditures	0	

D. "At Least As Effective As"

- 1 Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

A2 All connections within the City service area are metered, there are no known unmetered connections. B2 Number of CII accounts with mixed use meters estimated at 50% of total CII accounts. Actual number of mixed use meters is unknown. Beginning 2002, commercial accounts that add 5,000 or more square feet of landscaping as part of a land use permit process are required to have separate domestic and irrigation services, under City landscape water conservation ordinance. Projects adding less than 5,000 square feet of landscaping must install a submeter for all irrigation fed off their domestic water account.

<http://bmp.cuwcc.org/bmp/print/printall.lasso>

9/13/2006

BMP 05: Large Landscape Conservation Programs and Incentives

Reporting Unit: **City of Santa Cruz Water Department** BMP Form Status: **100% Complete** Year: **2004**

A. Water Use Budgets

- 1 Number of Dedicated Irrigation Meter Accounts: 418
- 2 Number of Dedicated Irrigation Meter Accounts with Water Budgets: 0
- 3 Budgeted Use for Irrigation Meter Accounts with Water Budgets (AF): 0
- 4 Actual Use for Irrigation Meter Accounts with Water Budgets (AF): 0
- 5 Does your agency provide water use notices to accounts with budgets each billing cycle? no

B. Landscape Surveys

- 1 Has your agency developed a marketing / targeting strategy for landscape surveys? no
 - a. If YES, when did your agency begin implementing this strategy?
 - b. Description of marketing / targeting strategy:
- 2 Number of Surveys Offered. 0
- 3 Number of Surveys Completed 0

- 4 Indicate which of the following Landscape Elements are part of your survey:
 - a. Irrigation System Check no
 - b. Distribution Uniformity Analysis no
 - c. Review / Develop Irrigation Schedules no
 - d. Measure Landscape Area no
 - e. Measure Total Irrigable Area no
 - f. Provide Customer Report / Information no
- 5 Do you track survey offers and results? no
- 6 Does your agency provide follow-up surveys for previously completed surveys? no
 - a. If YES, describe below:

C. Other BMP 5 Actions

- 1 An agency can provide mixed-use accounts with ETo-based landscape budgets in lieu of a large landscape survey program. Does your agency provide mixed-use accounts with landscape budgets? no
- 2 Number of CII mixed-use accounts with landscape budgets. 0
- 3 Do you offer landscape irrigation training? no
- 4 Does your agency offer financial incentives to improve no

<http://bmp.cuwcc.org/bmp/print/printall.lasso>

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landscape water use efficiency?

Type of Financial Incentive:	Budget (Dollars/Year)	Number Awarded to Customers	Total Amount Awarded
------------------------------	-----------------------	-----------------------------	----------------------

- a. Rebates
- b. Loans
- c. Grants

- 5 Do you provide landscape water use efficiency information to new customers and customers changing services? yes
 - a. If YES, describe below:

New residential and commercial landscapes are reviewed for conformance with the City's landscape water conservation requirements and standards. Applicants are provided with information on water efficient landscape designs and irrigation methods.

- 6 Do you have irrigated landscaping at your facilities? yes
 - a. If yes, is it water-efficient? yes
 - b. If yes, does it have dedicated irrigation metering? no
- 7 Do you provide customer notices at the start of the irrigation season? yes
- 8 Do you provide customer notices at the end of the irrigation season? yes

D. Landscape Conservation Program Expenditures

	This Year	Next Year
1 Budgeted Expenditures	0	0
2 Actual Expenditures	0	

E. "At Least As Effective As"

- 1 Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

F. Comments

While the City does not have monthly or bimonthly water budgets as indicated above, 93 out of the 418 irrigation accounts do have an annual water budget assigned to the account. The budget is given to all new development/landscape projects that are reviewed as part of building permit process and required by the City's landscape water conservation ordinance. Budgets are based on 80% of ETo. After plant establishment period, annual water use is compared with the landscape water budget and those sites with water consumption in excess of their water budget are sent customized letters indicating percent over budget and suggesting actions to reduce irrigation use before the start of the next irrigation season.

<http://bmp.cuwcc.org/bmp/print/printall.lasso>

9/13/2006

BMP 06: High-Efficiency Washing Machine Rebate Programs

Reporting Unit: **City of Santa Cruz Water Department** BMP Form Status: **100% Complete** Year: **2004**

A. Implementation

- 1 Do any energy service providers or waste water utilities in your service area offer rebates for high-efficiency washers? yes
 - a. If YES, describe the offerings and incentives as well as who the energy/waste water utility provider is.
- PG&E offers rebates for high efficiency residential clothes washers in our service area. Rebates are also available for multi-family common area laundry machines through LighWash program administered by Energy Solutions.
- 2 Does your agency offer rebates for high-efficiency washers? yes
- 3 What is the level of the rebate? 100
- 4 Number of rebates awarded. 674

B. Rebate Program Expenditures

	This Year	Next Year
1 Budgeted Expenditures	60000	60000
2 Actual Expenditures	70200	

C. "At Least As Effective As"

- 1 Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
 - a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

City of Santa Cruz also participates in LighWash program which is administered by Energy Solutions. We offered a \$200 water incentive for qualifying customers installing efficient appliances in multifamily common area laundry rooms. There was a total of 28 clothes washers installed in MF common area laundry rooms under the LighWash program in 2004.

<http://bmp.cuwcc.org/bmp/print/printall.lasso>

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the City. Additional public information materials were developed, including explanation of the new rates, a meter reading handout and a lawn watering guide to help customers conserve water and control water bills.

BMP 07: Public Information Programs

Reporting Unit: **City of Santa Cruz Water Department**
 BMP Form Status: **100% Complete**
 Year: **2004**

A. Implementation

1. Does your agency maintain an active public information program to promote and educate customers about water conservation? **yes**

a. If YES, describe the program and how it's organized.

The Santa Cruz Water Department publishes a utility newsletter that is delivered to all mailing addresses in the service area. This newsletter, and the City's web site, <http://www.ci.santa-cruz.ca.us/w/index.html> are the primary tools for educating customers about water conservation. The Santa Cruz Sentinel is the local newspaper used primarily for advertising rebate programs. General conservation messages are coordinated with a county wide organization of water agencies. The City distributes a variety of brochures, booklets, and informational materials, like the Council's Practical Plumbing Handbook.

2. Indicate which and how many of the following activities are included in your public information program.

Public Information Program Activity	Yes/No	Number of Events
a. Paid Advertising	yes	12
b. Public Service Announcement	no	
c. Bill Inserts / Newsletters / Brochures	yes	2
d. Bill showing water usage in comparison to previous year's usage	yes	
e. Demonstration Gardens	no	
f. Special Events, Media Events	yes	1
g. Speaker's Bureau	yes	3
h. Program to coordinate with other government agencies, industry and public interest groups and media	yes	

B. Conservation Information Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? **No**
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

Public information activities in 2004 were focused on the City's water rate study, the reasons for increased water rates, the change in residential rate structure, and the change from bimonthly to monthly billing inside

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9/13/2006

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BMP 08: School Education Programs

Reporting Unit: **City of Santa Cruz Water Department**
 BMP Form Status: **100% Complete**
 Year: **2004**

A. Implementation

1. Has your agency implemented a school information program to promote water conservation? **yes**

2. Please provide information on your school programs (by grade level).

Grade	Are grade-appropriate materials distributed?	No. of class presentations	No. of students reached	No. of teachers' workshops
Grades K-3rd	yes	0	0	0
Grades 4th-6th	yes	5	112	0
Grades 7th-8th	yes	0	0	0
High School	no	0	0	0

3. Did your Agency's materials meet state education framework requirements? **yes**

4. When did your Agency begin implementing this program? **1/1/1980**

B. School Education Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? **No**
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The Water Department offers ranger guided tours of Loch Lomond Reservoir and staff-guided tours of the Water Treatment Plant to elementary students in addition to offering curriculum and classroom presentations. A junior ranger program at Loch Lomond Reservoir was also developed in 2004.

BMP 09: Conservation Programs for CII Accounts

Reporting Unit: **City of Santa Cruz Water Department**
 BMP Form Status: **100% Complete**
 Year: **2004**

A. Implementation

1. Has your agency identified and ranked COMMERCIAL customers according to use? **yes**
2. Has your agency identified and ranked INDUSTRIAL customers according to use? **yes**
3. Has your agency identified and ranked INSTITUTIONAL customers according to use? **yes**

Option A: CII Water Use Survey and Customer Incentives Program

4. Is your agency operating a CII water use survey and customer incentives program for the purpose of complying with BMP 9 under this option? **yes**

CII Surveys	Commercial Accounts	Industrial Accounts	Institutional Accounts
a. Number of New Surveys Offered	0	0	0
b. Number of New Surveys Completed	0	0	0
c. Number of Site Follow-ups of Previous Surveys (within 1 yr)	0	0	0
d. Number of Phone Follow-ups of Previous Surveys (within 1 yr)	0	0	0
CII Survey Components	Commercial Accounts	Industrial Accounts	Institutional Accounts
e. Site Visit	no	no	no
f. Evaluation of all water-using apparatus and processes	no	no	no
g. Customer report identifying recommended efficiency measures, paybacks and agency incentives	no	no	no
Agency CII Customer Incentives	Budget (\$/Year)	No. Awarded to Customers	Total \$ Amount Awarded
h. Rebates	0	27	3800
i. Loans	0	0	0
j. Grants	0	0	0
k. Others	0	0	0

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Option B: CII Conservation Program Targets

5. Does your agency track CII program interventions and water savings for the purpose of complying with BMP 9 under this option? no
6. Does your agency document and maintain records on how savings were realized and the method of calculation for estimated savings? no
7. Estimated annual savings (AF/yr) from site-verified actions taken by agency since 1991. 1.1
8. Estimated annual savings (AF/yr) from non-site-verified actions taken by agency since 1991

B. Conservation Program Expenditures for CII Accounts

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

In calendar year 2004, there were 15 commercial rebates for clothes washers. Of those 15, 5 were Lightwash commercial rebates. The total savings calculated for commercial clothes washer rebates is (57.5 gpd X 15 x 365 days)= 314,812 gal/year or 0.9 acre-feet. The city also provided rebates for 7 low consumption and 9 waterfree urinals, saving another 0.2 ac-ft annually. A CII survey program is planned for FY2005/2006. Rebate budget is included in BMP 14.

BMP 09a: CII ULFT Water Savings

Reporting Unit: **City of Santa Cruz Water Department** BMP Form Status: **100% Complete** Year: **2004**

1. Did your agency implement a CII ULFT replacement program in the reporting year? Yes
- If No, please explain why on Line B.

A. Targeting and Marketing

1. What basis does your agency use to target customers for participation in this program? Check all that apply
- Consumption ranking
Potential savings
CII Sector or subsector

- a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

The most effective method for marketing has been direct communication (written and verbal) with commercial customers about the cost of water and sewer service and the benefits of toilet replacement in controlling their water and sewer bills.

2. How does your agency advertise this program? Check all that apply.
- Direct letter
Bill message
Newsletter
Telephone
Web page
Newspapers

- a. Describe which method you found to be the most effective overall, and which was the most effective per dollar expended.

Direct letter is the most effective method. Letters can be tailored to the individual customer, and provide an estimate of the potential annual water savings and \$ savings on water and sewer bills, for consideration by facility managers and decision makers.

B. Implementation

1. Does your agency keep and maintain customer participant information? (Read the Help information for a complete list of all the information for this BMP.) Yes
2. Would your agency be willing to share this information if the CUWCC did a study to evaluate the program on behalf of your agency? Yes
3. What is the total number of customer accounts participating in the program during the last year? 41

CII Number of Toilets Replaced

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Subsector

4	Standard Gravity Tank	Air Assisted	Valve Floor Mount	Valve Wall Mount	Type Not Specified
a. Offices	25	0	5	0	0
b. Retail / Wholesale	12	0	0	0	0
c. Hotels	171	0	0	0	0
d. Health	11	0	0	0	0
e. Industrial	5	0	0	0	0
f. Schools: K to 12	1	0	7	6	0
g. Eating	2	3	0	0	0
h. Government	0	0	0	0	0
i. Churches	1	0	0	0	0
j. Other	18	0	0	0	0

5. Program design

Rebate or voucher
Retrofit on resale

6. Does your agency use outside services to implement this program? No

a. If yes, check all that apply

7. Participant tracking and follow-up

Letter
Site Visit

8. Based on your program experience, please rank on a scale of 1 to 5, with 1 being the least frequent cause and 5 being the most frequent cause, the following reasons why customers refused to participate in the program

- a. Disruption to business 3
- b. Inadequate payback 4
- c. Inadequate ULFT performance 3
- d. Lack of funding 5
- e. American's with Disabilities Act 1
- f. Permitting 1
- g. Other: Please describe in B 9 5

9. Please describe general program acceptance/resistance by customers, obstacles to implementation, and other issues affecting program implementation or effectiveness.

Water use efficiency does not seem to be a business priority. This may change as both water and sewer costs are rising locally in excess of inflation rate.

10. Please provide a general assessment of the program for this reporting year. Did your program achieve its objectives? Were your targeting and marketing approaches effective? Were program costs in line with expectations and budgeting?

Commercial properties sell much less frequently than do residential properties, so the time of sale program did not produce many toilet change outs at commercial properties. We did manage to convince our largest hotel to replace all of its toilets with the rebate program in 2004. We expect more participation with commercial customers in coming years with the rising cost of water service.

C. Conservation Program Expenditures for CII ULFT

1. CII ULFT Program: Annual Budget & Expenditure Data

	Budgeted	Actual Expenditure
a. Labor	0	0
b. Materials	0	0
c. Marketing & Advertising	0	0
d. Administration & Overhead	0	0
e. Outside Services	0	0
f. Total	0	0

2. CII ULFT Program: Annual Cost Sharing

a. Wholesale agency contribution	0
b. State agency contribution	0
c. Federal agency contribution	0
d. Other contribution	0
e. Total	0

D. Comments

We don't track costs for this program separately from the residential rebate programs. Budget for all toilet rebates are included in BMP 14 figures.

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BMP 11: Conservation Pricing

Reporting Unit: **BMP Form**
City of Santa Cruz Water Department Status: **Year:**
100% Complete **2004**

A. Implementation**Rate Structure Data Volumetric Rates for Water Service by Customer Class****1. Residential**

a. Water Rate Structure Increasing Block
b. Sewer Rate Structure Non-volumetric Flat Rate
c. Total Revenue from Volumetric Rates \$6579908
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$3087959

2. Commercial

a. Water Rate Structure Uniform
b. Sewer Rate Structure Uniform
c. Total Revenue from Volumetric Rates \$2016091
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$586240

3. Industrial

a. Water Rate Structure Uniform
b. Sewer Rate Structure Uniform
c. Total Revenue from Volumetric Rates \$714869
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$95333

4. Institutional / Government

a. Water Rate Structure Uniform
b. Sewer Rate Structure Uniform
c. Total Revenue from Volumetric Rates \$167540
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$93010

5. Irrigation

a. Water Rate Structure Uniform
b. Sewer Rate Structure Service Not Provided
c. Total Revenue from Volumetric Rates \$821721
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$172347

6. Other

a. Water Rate Structure Uniform
b. Sewer Rate Structure Service Not Provided
c. Total Revenue from Volumetric Rates \$88442
d. Total Revenue from Non-Volumetric Charges, Fees and other Revenue Sources \$43146

B. Conservation Pricing Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	60000	0
2. Actual Expenditures	68000	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP? No

a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The City completed a comprehensive water rate study in 2004 and implemented new rates and a new rate structure in June. Single residential and duplex accounts are now billed using a five tier increasing block rate structure, instead of three.

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BMP 12: Conservation Coordinator

Reporting Unit: **BMP Form Status:** **Year:**
City of Santa Cruz Water Department **100% Complete** **2004**

A. Implementation

- Does your Agency have a conservation coordinator? yes
- Is this a full-time position? yes
- If no, is the coordinator supplied by another agency with which you cooperate in a regional conservation program?
- Partner agency's name
- If your agency supplies the conservation coordinator:
 - What percent is this conservation coordinator's position? 100%
 - Coordinator's Name Toby Goddard
 - Coordinator's Title Water Conservation Coordinator
 - Coordinator's Experience and Number of Years 10 years
 - Date Coordinator's position was created (mm/dd/yyyy) 1/1/1986
- Number of conservation staff, including Conservation Coordinator 3

B. Conservation Staff Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	217733	222256
2. Actual Expenditures	218120	

C. "At Least As Effective As"

- Is your AGENCY implementing an "at least as effective as" variant of this BMP? no
 - If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments**BMP 13: Water Waste Prohibition**

Reporting Unit: **BMP Form Status:** **Year:**
City of Santa Cruz Water Department **100% Complete** **2004**

A. Requirements for Documenting BMP Implementation

- Is a water waste prohibition ordinance in effect in your service area? yes
 - If YES, describe the ordinance

In 1981, the City adopted an ordinance prohibiting water waste in order to conserve the water supply of the City of Santa Cruz for the greatest public benefit and to discourage wasteful and unproductive uses of water. The ordinance was revised and expanded in 2003. The uses of water that are considered to be wasteful or without reasonable purpose include the following: 1. Unauthorized use of water from a fire hydrant, 2. Watering of landscaping in a manner that allows excess water to run to waste, 3. Uncorrected plumbing leaks, 4. Outdoor washing, including cleaning of structures and vehicles, and washing of sidewalks, walkways, driveways, and parking lots, without the use of a positive shut-off nozzle, 5. Operation of fountains and commercial car washes, unless water is recycled, 6. Installation of any new mechanical equipment with a single pass cooling system, 7. Other indiscriminate running of water. These regulations against water waste are in effect on a permanent basis throughout the water service area. In addition, the City's ordinance authorizes the water director to temporarily prohibit other nonessential uses of water when needed to help avert a water supply shortage.

- Is a copy of the most current ordinance(s) on file with CUWCC? yes

- List local jurisdictions in your service area in the first text box and water waste ordinance citations in each jurisdiction in the second text box:

City of Santa Cruz, County of Santa Cruz, City of Capitola	Santa Cruz Municipal Code, Chapter 16.02 and Santa Cruz County Code, Chapter 7.74
--	---

B. Implementation

- Indicate which of the water uses listed below are prohibited by your agency or service area.
 - Gutter flooding yes
 - Single-pass cooling systems for new connections yes
 - Non-recirculating systems in all new conveyor or car wash systems yes
 - Non-recirculating systems in all new commercial laundry systems yes
 - Non-recirculating systems in all new decorative fountains yes
 - Other, please name
Washing exterior surfaces, structures and vehicles without a shut off nozzle, unauthorized use of fire hydrants, uncorrected plumbing leaks, indiscriminant running of water yes
- Describe measures that prohibit water uses listed above

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Field contact by customer service staff, letters, phone calls, and citations

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Water Softeners:

3. Indicate which of the following measures your agency has supported in developing state law:

- a. Allow the sale of more efficient, demand-initiated regenerating DIR models.

no
- b. Develop minimum appliance efficiency standards that:

i.) Increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used

no

ii.) Implement an identified maximum number of gallons discharged per gallon of soft water produced

no
- c. Allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply

no
4. Does your agency include water softener checks in home water audit programs?

no
5. Does your agency include information about DIR and exchange-type water softeners in educational efforts to encourage replacement of less efficient timer models?

no

C. Water Waste Prohibition Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	0	0
2. Actual Expenditures	0	

D. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as" variant of this BMP?

no
- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

E. Comments

Water waste ordinance enforcement activity and expenditures are not tracked separately

BMP 14: Residential ULFT Replacement Programs

Reporting Unit:
City of Santa Cruz Water
Department

BMP Form Status:
100% Complete

Year:
2004

A. Implementation

	Single-Family Accounts	Multi- Family Units
1. Does your Agency have program(s) for replacing high-water-using toilets with ultra-low flush toilets?	yes	yes
Number of Toilets Replaced by Agency Program During Report Year		
Replacement Method	SF Accounts	MF Units
2. Rebate	475	201
3. Direct Install	0	0
4. CBO Distribution	0	0
5. Other	778	391
Total	1253	592

6. Describe your agency's ULFT program for single-family residences.

The City has two ulft replacement programs. It continues to offer a \$75 rebate for replacing inefficient tank type toilets with 1.6 gallon ULF toilets. In January 2003, the City adopted a plumbing fixture retrofit (time of sale) ordinance. It requires all residential, commercial, and industrial buildings to be retrofitted with low-consumption toilets, showerheads and urinals, whenever real estate is sold. The numbers above are just residential replacements.

7. Describe your agency's ULFT program for multi-family residences.

Same as above.

8. Is a toilet retrofit on resale ordinance in effect for your service area?

yes

9. List local jurisdictions in your service area in the left box and ordinance citations in each jurisdiction in the right box:

The City of Santa Cruz, Santa Cruz County and the City of Capitola	Santa Cruz Municipal Code 16.03 Santa Cruz County Code 7.74 and Capitola Municipal Code 13.02
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B. Residential ULFT Program Expenditures

	This Year	Next Year
1. Budgeted Expenditures	160000	160000
2. Actual Expenditures	135514	

C. "At Least As Effective As"

1. Is your AGENCY implementing an "at least as effective as"

no

variant of this BMP?

- a. If YES, please explain in detail how your implementation of this BMP differs from Exhibit 1 and why you consider it to be "at least as effective as."

D. Comments

The two methods for replacing toilets in our service area are rebates and the Plumbing Fixture Retrofit ordinance. Toilets replaced under the PFR ordinance are listed under Line 5 (Other) method. Budget figures include appropriations and expenditures for commercial toilet program.